

United States District Court  
Northern District of California

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN JOSE DIVISION

PAPST LICENSING GMBH & CO. KG,  
Plaintiff,  
v.  
XILINX INC,  
Defendant.

Case No. 16-CV-00925-LHK  
Case No. 16-CV-00926-LHK

**ORDER GRANTING MOTION FOR  
JUDGMENT ON THE PLEADINGS**

Re: Dkt. No. 88 (Case No. 16-CV-00925);  
Dkt. No. 81 (Case No. 16-CV-00926)

PAPST LICENSING GMBH & CO. KG,  
Plaintiff,  
v.  
ALTERA CORPORATION,  
Defendant.

Plaintiff Papst Licensing GmbH & Co. KG (“Papst” or “Plaintiff”) filed patent infringement suits against Xilinx, Inc. (“Xilinx”) and Altera Corporation (“Altera”) (collectively, “Defendants”). Plaintiff alleges that Defendants infringe claims of U.S. Patent Nos. 6,574,759 and 6,704,891. On May 11, 2016, Defendants filed identical Motions for Judgment on the Pleadings, contending that the asserted claims of Papst’s patents are invalid for failure to claim patent-eligible

subject matter under 35 U.S.C. § 101. On May 25, 2016, Papst filed an opposition. On May 30, 2016, Defendants filed a reply. *See* ECF Nos. 88 (“Motion”), 92 (“Opposition”), 94 (“Reply”) (Case No. 16-CV-00925-LHK); ECF Nos. 81, 82, 84 (Case No. 16-CV-00926-LHK).<sup>1</sup>

Having considered the parties’ submissions, the record, and the relevant law, the Court GRANTS Defendants’ Motion for the reasons set forth below.

## **I. BACKGROUND**

### **A. Factual Background**

#### **1. The Parties**

Plaintiff Papst is a German patent licensing company with its principal place of business in St. Georgen, Germany. No. 16-CV-00925-LHK, ECF No. 1 ¶¶ 1, 6. Papst is the assignee of the two patents at issue in the instant case, which Papst acquired through Papst’s predecessor-in-interest, Rambus, Inc. *Id.* ¶¶ 7, 13, 19. Defendant Xilinx is a Delaware corporation that supplies programmable logic devices and software. *Id.* ¶¶ 2, 13–15. Defendant Altera is also a Delaware corporation that supplies programmable logic devices and software. No. 15-CV-00926-LHK, ECF No. 1 ¶¶ 2, 13–15.<sup>2</sup>

#### **2. The Asserted Patents**

At issue are U.S. Patent Nos. 6,574,759 (the “’759 patent”) and 6,704,891 (the “’891 patent”) (collectively, the “Papst Patents”). Each of the Papst Patents is entitled “Method for Verifying and Improving Run-Time of a Memory Test.”<sup>3</sup> The ’891 patent resulted from a continuation of the same patent application that led to the ’759 patent, meaning that the two

<sup>1</sup> Because the parties’ motions for judgment on the pleadings in the two cases are substantively identical, for simplicity, references to the Motion, Opposition, and Reply are to ECF Nos. 88, 92, and 94, respectively, in Case No. 16-CV-00925-LHK.

<sup>2</sup> Though not relevant for purposes of the Motion, Altera states that it is now a wholly owned subsidiary of third-party counterclaimant Intel Corporation. No. 15-CV-00926-LHK, ECF No. 54 (Answer) ¶ 2. Intel has asserted breach-of-contract counterclaims against Papst stemming from an alleged covenant not to sue Intel and its affiliates concerning the Papst Patents. *Id.* ¶¶ 38–66.

<sup>3</sup> The ’759 and ’891 patents are attached to the Complaints filed in each case as Exhibits A and B, respectively. *See* No. 16-CV-00925-LHK, ECF Nos. 1-1, 1-2; No. 16-CV-00926-LHK, ECF Nos. 1-1, 1-2.

1 patents share nearly identical specifications.<sup>4</sup> For simplicity, the Court’s citations to the text and  
2 figures of the Papst Patents refer to the ’759 patent specification.

3 The Papst Patents relate generally to the field of testing computer memory devices, and  
4 more specifically, to methods for creating and verifying sets of instructions or operations used to  
5 test memory devices. *See* ’759 Patent, at abstract (“A method of generating and verifying a  
6 memory test is disclosed.”). According to the Papst Patents, improvements in the size and  
7 capacity of integrated circuit memory devices have “revolutionized computer systems,  
8 telecommunications equipment and consumer electronics.” ’759 patent, col. 1:11–12. Such  
9 memory devices, however, “must be reliable.” *Id.*, col. 1:15–16. “Accordingly, memory devices  
10 have been tested since their first manufacture. Very early in the history of memory device testing,  
11 specialized equipment and automated test routines were developed to improve testing efficiency.”  
12 *Id.*, col. 1:16–21.

13 As described by the Papst Patents, “[i]n creating a [memory] test, a test writer must define  
14 a sequence of operations which store and retrieve data to/from the memory device in accordance  
15 with certain ‘operating constraints’” or rules imposed by the capabilities of the particular memory  
16 being tested. *Id.*, col. 1:58–61. These operating constraints or rules may be “timing-based,”  
17 meaning that a minimum amount of time must elapse between certain memory operations, or  
18 “state-based,” meaning that certain operations must occur in a particular order. *See id.*, col. 1:63–  
19 2:1; col. 2:63–3:17.

20 While early memory devices were “simple and characterized by relatively few  
21 constraints,” contemporary memory devices have “increased in complexity” and “have an  
22 increased number of operating constraints which must be obeyed during a sequence of memory  
23 system operations.” *Id.*, col. 2:2–6; col. 2:9–11.

24 The Papst Patents note several disadvantages of the conventional methods for creating

---

25  
26 <sup>4</sup> *See Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1337 (Fed. Cir. 2006) (“The patents are  
27 continuations or divisionals of a common parent application and therefore necessarily have almost  
28 identical specifications.”); *see also* Opp. at 2 n.1 (noting that Papst Patents share substantially the  
same specification).

memory tests by hand. Specifically, the Papst Patents note that “[m]emory device test writers currently generate test protocols without benefit of a tool which provides feedback as to whether or not a test step or test routine violates one or more memory device constraints.” *Id.*, col. 2:23–27. Similarly, “the conventional process for generating a test does not include a mechanism for verifying compliance with actual memory device constraints.” *Id.*, col. 3:15–17. As a result, “when a memory device fails a test,” it is unclear whether “the memory device is truly broken, or whether the test has been improperly constructed” by failing to comply with all required timing-based and state-based rules governing use of the memory. *Id.*, col. 2:29–31.

According to the Papst Patents, one way in which this problem was addressed in the “conventional process of test generation” was by using a “known-good” memory device “to test the test” in a “trial-and-error” fashion. *Id.*, col. 2:55–57; col. 2:37; *see also id.*, at Fig. 1 (describing prior art process). Identifying an appropriate reference device, however, was sometimes done by running another kind of test to “attempt to identify known-good memory devices.” *Id.*, col. 3:26. This could lead to a “chicken and egg” problem, since “known-good memory devices can not be identified until a valid set of tests have been run.” *Id.*, col. 3:19–24.

The Papst Patents purport to overcome this problem with a “simulator . . . using a parameter list covering all relevant constraints” to model the memory device to be tested. *Id.*, col. 3:58–60. The simulator “is event-driven and directly models the behavior of one or more memory devices or modules on a communications channel” using a “parameter file . . . that describes the architectural and timing characteristics of the memory device or module being simulated.” *Id.*, col. 5:7–12. The “parameter file” of rules is provided by the test writer. *Id.* A “time-ordered sequence” of operations, *i.e.*, the test, “is passed through the simulator to verify that it adheres to the operating constraints” of the memory device for which the test is intended. *Id.*, col. 3:60–63. If the test violates any of the rules required by the memory device specification, “error messages may offer suggested fixes, such as timing adjustments required to place the sequence of operations in compliance with the constraints.” *Id.*, col. 3:64–67. In addition, the Papst Patents disclose the use of a “packer” to minimize the length of time a particular test will take to run “in relation to the

given constraints” of the memory device. *Id.*, col. 4:1–4.

Figure 2 of the ’759 patent is instructive as to the general sequence of steps taught by the claimed process:

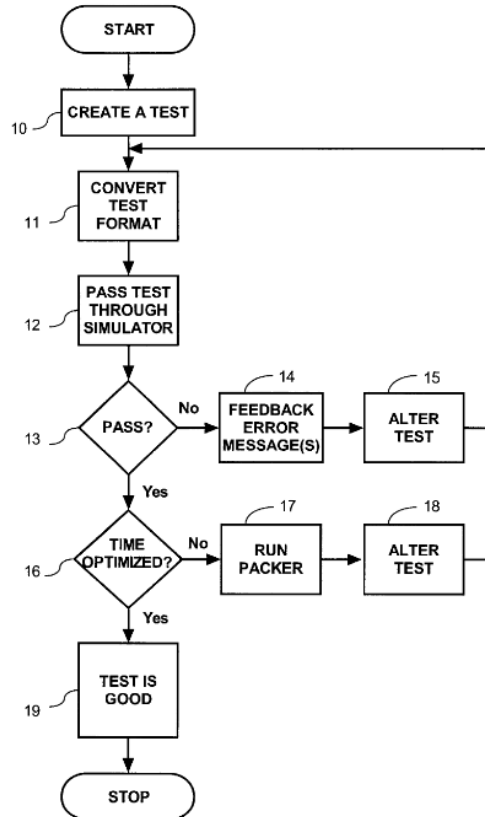


FIG. 2

At step 10, a test writer creates a test for a particular memory device. ’759 patent, col. 7:41–49. The test is then passed through the simulator modeling the operational constraints of the memory device at step 12. *Id.*, col. 7:49–55. If the test fails, error messages are generated at step 14, the test writer alters the test accordingly at step 15, and the process is repeated until errors no longer remain. *Id.*, col. 7:56–60. Once the test is verified, it may be run through the packer at step 17, which “may dictate alteration of the test . . . to minimize the run-time of the sequence of operations.” *Id.*, col. 7:61–67.

The Papst Patents describe the implementation of the preferred embodiment of the simulator and packer as follows:

As presently preferred, the simulator is written in a high level language like ‘C’ on a UNIX based platform. A standard tool set or

threads package, such as the CSIM17 software library offered by Mesquite Software™, may be used to write the simulator. The simulator may be written to test memory devices on an individual basis, in groups (such as modules), and/or to test a . . . fully populated channel with memory modules. The packer function is presently implemented as a ‘Perl script,’ a well known UNIX programming language.

’759 patent, col. 6:55–65; *see also id.*, col. 5:5–34 (describing use of simulator); col. 5:59–6:52 (describing use of packer).

### 3. The Asserted Claims

Plaintiff asserts claims 1, 4, 5 and 14 of the ’759 patent and claims 1 and 2 of the ’891 patent against both Xilinx and Altera. Mot. at 4–5; Opp. at 4. Plaintiff additionally asserts claims 5 and 6 of the ’891 patent against Xilinx alone. *Id.* The Court refers to these claims collectively as the “asserted claims.” All of the asserted claims are method claims. With minor differences, the asserted claims of the two patents are similar in nature.<sup>5</sup> The text of the asserted claims of the ’759 patent is as follows:

1. A method of generating a test for a memory having defined operating constraints, the method comprising:
  - developing a set of operations defining the test, where the set of operations is ordered in time;
  - passing the set of operations through a simulator capable of determining whether the set of operations violates any one of the operating constraints; and
  - upon determining that the set of operations violates any one of the operating constraints, outputting an error message, wherein the error message comprises an adjustment to the set of operations which will resolve the operating constraint violation.
4. A method of generating a test for a memory having defined operating constraints, the method comprising:
  - developing a set of operations defining the test, where the set of operations is ordered in time;
  - passing the set of operations through a simulator capable of determining whether the set of operations violates any one of the operating constraints; and
  - upon determining that the set of operations violates any one of the operating constraints, outputting an error message, wherein the error message identifies a violated time-based constraint.

<sup>5</sup> As discussed further below, Claim 14 of the ’759 patent differs in that it includes a limitation directed to “packer” functionality, which is not present in the remaining claims.

5. The method of claim 4, wherein the error message further identifies a timing adjustment to the set of operations which will resolve the time-based constraint violation.

14. A method of generating and verifying a test for a memory having defined operating constraints, the method comprising:

defining one or more commands, wherein each one of the commands comprises a group of operations;

forming a time ordered sequence of commands defining the test;

verifying the test by passing the time ordered sequence of commands through a simulator capable of determining whether the time order [sic] sequence of commands violates any one of the operating constraints;

passing the verified test through a packer to minimize run time of the test in relation to the operating constraints.

The text of the asserted claims of the '891 patent is as follows:

1. A method of simulating the behavior of a memory device, the method comprising:

defining a set of operating constraints based on the characteristics of the memory device;

providing a set of memory device operations, wherein the set of memory device operations is ordered in time;

passing the set of operations through a simulator capable of determining whether the set of memory device operation [sic] violates any one of the operating constraints; and

outputting an error message upon determining that the set of operations violates any one of the operating constraints.

2. The method of claim 1, wherein the error message comprises an adjustment to the set of operations which will resolve the operation constraint violation.

5. The method of claim 1, wherein the error message identifies a violated time-based constraint.

6. The method of claim 5, wherein the error message further identifies a timing adjustment to the set of operations which will resolve the time-based constraint violation.

## **B. Procedural History**

### **1. Altera**

On October 28, 2014, Altera filed a declaratory judgment action against Papst in this district, and sought a declaration that the Papst Patents were neither valid nor infringed. *Altera Corp. v. Papst Licensing GmbH & Co. KG*, No. 14-CV-04794-LHK, ECF No. 1 (N.D. Cal. Oct. 28, 2014). On February 6, 2015, Papst moved to dismiss Altera's California case for lack of personal jurisdiction, or, in the alternative, to transfer the case to the United States District Court



for the District of Delaware. *See id.*, ECF No. 18. On February 20, 2015, Altera filed an opposition. *Id.*, ECF Nos. 28, 45. On April 22, 2015, Papst filed a reply. *Id.*, ECF No. 51.

Meanwhile, on February 17, 2015, Papst filed an action against Altera in the District of Delaware, alleging that Altera infringed the Papst Patents. *Papst Licensing GmbH & Co. KG v. Altera Corp.*, No. 15-CV-00162-LPS, ECF No. 1 (D. Del. Feb. 17, 2015). On March 31, 2015, Altera filed a motion seeking to transfer the Delaware case to the Northern District of California, or alternatively to dismiss or stay the case under the first-to-file rule in view of the case previously filed by Altera against Papst in California. *Id.*, ECF Nos. 11–12. Papst filed an opposition on April 17, 2015. *Id.*, ECF No. 16. Altera filed a reply on April 27, 2015. *Id.*, ECF No. 18.

## 2. Xilinx

On November 7, 2014, Papst sued Xilinx in the United States District Court for the District of Delaware for alleged infringement of the Papst Patents. *Papst Licensing GmbH & Co. KG v. Xilinx, Inc.*, No. 14-CV-01376-LPS, ECF No. 1 (D. Del. Nov. 7, 2014). On February 2, 2015, Xilinx moved to transfer the Delaware case against Xilinx to the Northern District of California. *Id.*, ECF Nos. 13–14. Papst filed an opposition on February 20, 2015. *Id.*, ECF No. 18. Xilinx filed a reply on March 2, 2015. *Id.*, ECF No. 22.

On November 7, 2014, the same day that Papst sued Xilinx in Delaware, Xilinx filed a declaratory judgment action against Papst in the Northern District of California. *Xilinx, Inc. v. Papst Licensing GmbH & Co. KG*, No. 14-CV-04963-LHK, ECF No. 1 (N.D. Cal. Nov. 7, 2014). In the California case, Xilinx sought a declaration that the Papst Patents were neither valid nor infringed. *See id.* On February 6, 2015, Papst moved to dismiss Xilinx’s California case for lack of personal jurisdiction, or, in the alternative, to transfer the case to the District of Delaware. *See id.*, ECF No. 18. Xilinx took discovery on Papst’s motion to dismiss the California case, and thereafter filed an opposition on April 15, 2015. *Id.*, ECF No. 52. On April 22, 2015, Papst filed a reply. *Id.*, ECF No. 56.

## 3. Rulings on Motions to Dismiss and Transfer

On February 23, 2015, both California cases were reassigned to the undersigned judge. As



1 a result, by late February 2015, two cases between Defendants and Papst regarding the Papst  
2 Patents were pending before this Court, while two additional cases between Defendants and Papst  
3 regarding the Papst Patents were simultaneously pending in the District of Delaware.

4 On July 9, 2015, this Court granted Papst's motions to dismiss the California cases for lack  
5 of personal jurisdiction over Papst, ending the California cases. No. 14-CV-4963-LHK, ECF No.  
6 62; No. 14-CV-4794-LHK, ECF No. 57. Both Altera and Xilinx appealed to the United States  
7 Court of Appeals for the Federal Circuit. *See* Appeal Nos. 2015-1914, 2015-1919. On June 9,  
8 2016, the Federal Circuit granted Altera's unopposed motion to dismiss its appeal as moot. *See*  
9 No. 14-CV-4794-LHK, ECF No. 69 (Federal Circuit order). Xilinx's appeal remains pending.  
10 *See* Appeal No. 15-1919.

11 On September 1, 2015, a Magistrate Judge in Delaware issued a combined Memorandum  
12 Order that granted both Xilinx's and Altera's motions to transfer the Delaware cases to the  
13 Northern District of California. No. 14-CV-01376-LPS, ECF No. 49; No. 15-CV-00162-LPS,  
14 ECF No. 41. Papst filed objections, which a District Judge orally overruled on February 23, 2016.  
15 No. 14-CV-01376-LPS, ECF No. 54; No. 15-CV-00162-LPS, ECF No. 48. On February 24,  
16 2016, the cases were transferred to the Northern District of California and docketed as the instant  
17 cases, Nos. 16-CV-00925 and 16-CV-00926.

18 On March 22, 2016, this Court issued an order relating the two cases transferred from  
19 Delaware to the two dismissed California cases involving Defendants and Papst. *See* No. 14-CV-  
20 00925, ECF No. 66. The two cases transferred from Delaware were accordingly reassigned to the  
21 undersigned judge that same day.

22 On May 11, 2016, Defendants filed their substantively identical Motions for Judgment on  
23 the Pleadings. On May 25, 2016, Plaintiff filed an opposition. On May 30, 2016, Defendants  
24 filed a reply. *See* ECF Nos. 88, 92, 94 (Case No. 16-CV-00925); ECF Nos. 81, 82, 84 (Case No.  
25 16-CV-00926).

## II. LEGAL STANDARD

### A. Motion for Judgment on the Pleadings Under Fed. R. Civ. P. 12(c)

“After the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings.” Fed. R. Civ. P. 12(c). “Judgment on the pleadings is properly granted when, accepting all factual allegations in the complaint as true, there is no issue of material fact in dispute, and the moving party is entitled to judgment as a matter of law.” *Chavez v. United States*, 683 F.3d 1102, 1108 (9th Cir. 2012) (quotation marks and alteration omitted). Like a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6), a motion under Rule 12(c) challenges the legal sufficiency of the claims asserted in the complaint. *See id.* Indeed, a Rule 12(c) motion is “functionally identical” to a Rule 12(b)(6) motion, and courts apply the “same standard.” *Dworkin v. Hustler Magazine Inc.*, 867 F.2d 1188, 1192 (9th Cir. 1989) (explaining that the “principal difference” between Rule 12(b)(6) and Rule 12(c) “is the tim[ing] of filing”); *see also United States ex rel. Cafasso v. Gen. Dynamics C4 Sys.*, 637 F.3d 1047, 1054 n.4 (9th Cir. 2011).

Judgment on the pleadings should thus be entered when a complaint does not plead “enough facts to state a claim to relief that is plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). “The plausibility standard is not akin to a probability requirement, but it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Id.* (quotation marks omitted). For purposes of ruling on a Rule 12(c) motion, the Court “accept[s] factual allegations in the complaint as true and construe[s] the pleadings in the light most favorable to the nonmoving party.” *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008).

The Court, however, need not accept as true allegations contradicted by judicially noticeable facts, *see Shwarz v. United States*, 234 F.3d 428, 435 (9th Cir. 2000), and it “may look beyond the plaintiff’s complaint to matters of public record” without converting the Rule 12(c)

1 motion into a motion for summary judgment, *Shaw v. Hahn*, 56 F.3d 1128, 1129 n.1 (9th Cir.  
2 1995). Nor must the Court “assume the truth of legal conclusions merely because they are cast in  
3 the form of factual allegations.” *Fayer v. Vaughn*, 649 F.3d 1061, 1064 (9th Cir. 2011) (per  
4 curiam) (quotation marks omitted). Mere “conclusory allegations of law and unwarranted  
5 inferences are insufficient” to defeat a motion for judgment on the pleadings. *Adams v. Johnson*,  
6 355 F.3d 1179, 1183 (9th Cir. 2004).

## 7 **B. Patent Validity Challenges Under 35 U.S.C. § 101**

### 8 **1. Availability of Judgment on the Pleadings**

9 Defendants’ Motion asserts that the Papst Patents fail to claim patent-eligible subject  
10 matter under 35 U.S.C. § 101 in light of the U.S. Supreme Court’s decision in *Alice Corporation*  
11 *Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Whether a claim recites patent-  
12 eligible subject matter under Section 101 is a question of law. *In re Roslin Inst. (Edinburgh)*, 750  
13 F.3d 1333, 1335 (Fed. Cir. 2014) (“Section 101 patent eligibility is a question of law[.]”);  
14 *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (same). Accordingly, a district  
15 court may resolve the issue of patent eligibility under Section 101 by way of a motion for  
16 judgment on the pleadings. *See, e.g., buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351 (Fed.  
17 Cir. 2014) (affirming determination of ineligibility made on motion for judgment on the  
18 pleadings); *see also Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*,  
19 776 F.3d 1343, 1345 (Fed. Cir. 2014) (affirming determination of ineligibility made on 12(b)(6)  
20 motion); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014) (same).

21 Although claim construction is often desirable, and may sometimes be necessary, to  
22 resolve whether a patent claim is directed to patent-eligible subject matter, the Federal Circuit has  
23 explained that “claim construction is not an inviolable prerequisite to a validity determination  
24 under § 101.” *Bancorp Servs., L.L.C. v Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266,  
25 1273–1274 (Fed. Cir. 2013). Where the court has a “full understanding of the basic character of  
26 the claimed subject matter,” the question of patent eligibility may properly be resolved on the  
27 pleadings. *Content Extraction*, 776 F.3d at 1349; *see also Cardpool, Inc. v. Plastic Jungle, Inc.*,

No. 12-CV-04182-WHA, 2013 WL 245026, at \*4 (N.D. Cal. Jan. 22, 2013) (same), *aff'd*, 817 F.3d 1316 (Fed. Cir. 2016).

## 2. Burden of Proof

Before proceeding to the merits of Defendants' Motion, the Court addresses Plaintiff's contention concerning the appropriate burden of proof to be applied.

"Under § 282 of the Patent Act of 1952, a patent shall be presumed valid and the burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011) (citing 35 U.S.C. § 282) (quotation marks and alterations omitted).

Plaintiff states without elaboration that Defendants must establish a lack of patent-eligible subject matter by clear and convincing evidence—a heightened evidentiary standard applied in evaluating challenges to patent validity—rather than by a preponderance of the evidence. Opp. at 4:26, 15:18. In that regard, Plaintiff cites to *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1338–39 (Fed. Cir. 2013), for the proposition that the clear and convincing evidence standard applies. Opp. at 4. However, the *Ultramercial* decision relied upon by Plaintiff lacks precedential effect, as the U.S. Supreme Court vacated the judgment in the case "for further consideration in light of *Alice*." *WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870 (2014). On remand, the Federal Circuit reversed its prior decision and held, without mention of the clear and convincing evidence standard, that the claims at issue were not directed to patent-eligible subject matter. *See Ultramercial*, 772 F.3d at 711–12, 714–717.

No post-*Alice* decision of the U.S. Supreme Court or the Federal Circuit appears to directly address whether the clear and convincing evidence standard applies when evaluating a lack of patent-eligible subject matter on the pleadings. There is a split of authority amongst district courts as to the appropriate standard to be applied. Several courts have concluded that a heightened burden of proof makes little sense in the context of a motion to dismiss or motion for judgment on the pleadings, and therefore declined to apply the clear and convincing evidence standard. *See, e.g., TNS Media Res., LLC v. Tivo Res. & Analytics, Inc.*, No. 11-CV-4039-SAS, 2016 WL

817447, at \*10 (S.D.N.Y. Feb. 22, 2016) (“Because no evidence outside the pleadings is considered in deciding a motion to dismiss or a motion for judgment on the pleadings, it makes little sense to apply a clear and convincing evidence standard—a burden of proof—to such motions.”) (quotation marks and emphasis omitted); *Protegrity USA, Inc. v. Netskope, Inc.*, No. 15-CV-02515-YGR, 2015 WL 6126599, at \*4 (N.D. Cal. Oct. 19, 2015) (same). Other courts have applied the clear and convincing evidence standard to Section 101 challenges either without discussion, or because that standard is applied by the Federal Circuit in the context of other challenges to validity. *See OpenTV, Inc. v. Apple Inc.*, No. 15-CV-02008-EJD, 2016 WL 344845, at \*3 (N.D. Cal. Jan. 28, 2016) (noting split of authority and collecting cases); *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 109 F. Supp. 3d 916, 932 & n.6 (W.D. Tex. 2015) (same); *c.f. Bascom Res., LLC v. LinkedIn, Inc.*, 77 F. Supp. 3d 940, 945 (N.D. Cal. 2015) (holding that “an alleged infringer asserting an invalidity defense pursuant to § 101 bears the burden of proving invalidity by clear and convincing evidence” in summary judgment context).

However, the Court need not resolve this dispute in connection with the instant Motion. For the reasons set forth below, regardless of which standard applies, the Court concludes that Defendants have established that the asserted claims of the Papst Patents currently at issue are directed to patent-ineligible subject matter.

### **C. Substantive Legal Standards Applicable Under 35 U.S.C. § 101**

Defendants contend that the asserted claims of the Papst Patents are directed to unpatentable abstract ideas, and fail to “recite an inventive concept sufficient to transform the unpatentable abstract idea of using a simulator to verify a memory test into a patentable application of that idea.” Mot. at 1. Defendants therefore argue that judgment on the pleadings is appropriate because [t]he asserted claims are . . . invalid under 35 U.S.C. § 101.” *Id.* Because of the rapid evolution of the law concerning patent-eligible subject matter under Section 101 in recent years, the Court first discusses the legal framework applicable to Defendants’ Motion. The Court then turns to the application of that framework to the Papst Patents.

### 1. Patent-Eligible Subject Matter Under 35 U.S.C. § 101

Section 101 of Title 35 of the United States Code “defines the subject matter that may be patented under the Patent Act.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Under Section 101, the scope of patentable subject matter encompasses “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” *Id.* (quoting 35 U.S.C. § 101). These categories are broad, but they are not limitless. Section 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354 (quotation marks omitted). These three exceptions are not patent-eligible because “they are the basic tools of scientific and technological work,” which are “free to all men and reserved exclusively to none.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012) (quotation marks omitted). The U.S. Supreme Court has explained that allowing patent claims for such purported inventions would “tend to impede innovation more than it would tend to promote it,” thereby thwarting the primary object of the patent laws. *Id.* at 1293. However, the U.S. Supreme Court has also cautioned that “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Alice*, 134 S. Ct. at 2354 (quotation marks and alterations omitted). Accordingly, courts must “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Id.*

In *Alice*, the leading case on patent-eligible subject matter under Section 101, the U.S. Supreme Court refined the “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts” originally set forth in *Mayo*, 132 S. Ct. at 1296–97. This analysis, generally known as the “*Alice*” framework, proceeds in two steps as follows:

First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, we consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. We have described step two of this analysis as a search for an “‘inventive concept’”—*i.e.*, an element or combination of elements



that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

*Alice*, 134 S. Ct. at 2355. (citations omitted; alterations in original); *see also In re TLI Commc’ns Patent Litig.*, No. 2015-1372 (lead), --- F.3d ----, 2016 WL 2865693, at \*2 (Fed. Cir. May 17, 2016) (describing “the now familiar two-part test described by the U.S. Supreme Court in *Alice*”). The Court discusses the contours of analysis under the two steps of the *Alice* framework below.

## 2. *Alice* Step One — Identification of Claims Directed to an Abstract Idea

Neither the U.S. Supreme Court nor the Federal Circuit has set forth a bright line test separating abstract ideas from concepts that are sufficiently concrete so as to require no further inquiry under the first step of the *Alice* framework. *See, e.g., Alice*, 134 S. Ct. at 2357 (noting that “[the U.S. Supreme Court] need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (observing that the U.S. Supreme Court did not “delimit the precise contours of the ‘abstract ideas’ category in *Alice*”) (quotation marks omitted). As a result, in evaluating whether particular claims are directed to patent-ineligible abstract ideas, courts have generally begun by “compar[ing] claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, No. 2015-1244, --- F.3d ----, 2016 WL 2756255, at \*4 (Fed. Cir. May 12, 2016).

Two of the U.S. Supreme Court’s leading cases concerning the “abstract idea” exception involved claims held to be abstract because they were drawn to longstanding, fundamental economic practices. *See Alice*, 134 S. Ct. at 2356 (claims “drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk” were directed to an unpatentable abstract idea); *Bilski*, 561 U.S. at 611–12 (claims drawn to “the basic concept of hedging, or protecting against risk” were directed to an unpatentable abstract idea because “[h]edging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.”) (quotation marks omitted). Although courts have thus had little difficulty concluding that claims drawn to the simple automation of fundamental



economic practices similar to those at issue in *Bilski* and *Alice* are abstract<sup>6</sup>, the determination of whether other types of computer-implemented claims are abstract has proven more troublesome. *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1345 (Fed. Cir. 2015) (“[P]recision has been elusive in defining an all-purpose boundary between the abstract and the concrete[.]”).

As a result, in addition to comparing claims to prior U.S. Supreme Court and Federal Circuit precedents, courts considering computer-implemented inventions have taken varied approaches to determining whether particular claims are directed to an abstract idea. For example, courts have considered whether the claims purport to “improve the functioning of the computer itself,” *Alice*, 134 S. Ct. at 2359, which may suggest that the claims are not abstract, or instead whether “computers are invoked merely as a tool” to carry out an abstract process. *Enfish*, 2016 WL 2756255 at \*5; *see also id.* at \*4 (noting that “some improvements in computer-related technology when appropriately claimed are undoubtedly not abstract, such as a chip architecture, an LED display, and the like. Nor do we think that claims directed to software, as opposed to hardware, are inherently abstract[.]”).

Similarly, the Federal Circuit has considered whether claims are directed to “a problem that does not arise in the ‘brick and mortar context’” but rather is “particular to the Internet” as an indicator that a claim is not drawn to a patent-ineligible abstract idea. *DDR Holdings*, 773 F.3d at 1257–58 (holding that claims were not abstract where the “the claims recite an invention that is not merely the routine or conventional use of the Internet” but instead solve a specific problem by departing from “the routine, conventional functioning of Internet hyperlink protocol”).

---

<sup>6</sup> *See, e.g., buySAFE*, 765 F.3d at 1355 (creating a transaction performance guaranty for a commercial transaction on computer networks such as the Internet); *Accenture Global Servs., GmbH v. Guidewire Soft., Inc.*, 728 F.3d 1336, 1338 (Fed. Cir. 2013) (generating rule-based tasks for processing an insurance claim); *Bancorp Servs.*, 687 F.3d at 1278 (managing a stable value protected life insurance policy); *Dealertrack*, 674 F.3d at 1333 (processing loan information through a clearinghouse); *see also Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988, 991 (Fed. Cir. 2014) (non-prec.) (collecting cases).

Another helpful tool used by courts in the abstract idea inquiry is consideration of whether the claims are, in essence, directed to a mental process or a process that could be done with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (claim for verifying the validity of a credit card transaction over the Internet was invalid because the “steps can be performed in the human mind, or by a human using a pen and paper”); *see also*, *e.g.*, *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) (claims for computer-implemented system to enable borrowers to anonymously shop for loan packages were abstract where “[t]he series of steps covered by the asserted claims . . . could all be performed by humans without a computer”); *Intellectual Ventures I LLC v. Symantec Corp.*, 100 F. Supp. 3d 371, 383 (D. Del. 2015) (“Another helpful way of assessing whether the claims of the patent are directed to an abstract idea is to consider if all of the steps of the claim could be performed by human beings in a non-computerized ‘brick and mortar’ context.”) (citing *buySAFE*, 765 F.3d at 1353).<sup>7</sup>

Regardless of the particular analysis that is best suited to the specific facts at issue in a case, however, the Federal Circuit has emphasized that “a substantial class of claims are *not* directed to a patent-ineligible concept,” and thus “the first step of the [*Alice*] inquiry is a meaningful one.” *Enfish*, 2016 WL 2756255 at \*4 (emphasis in original). The court’s task is thus not to determine whether claims merely involve an abstract idea at some level, *see id.*, but rather to examine the claims “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Patents Corp.*, 790 F.3d at 1346.

### 3. Alice Step Two — Evaluation of Abstract Claims for a Limiting Inventive Concept

A claim drawn to an abstract idea is not necessarily invalid if the claim’s limitations—

---

<sup>7</sup> One court has noted that, like all tools of analysis, the “pencil and paper” analogy must not be unthinkingly applied. *See California Inst. of Tech. v. Hughes Commc’ns Inc.*, 59 F. Supp. 3d 974, 995 (C.D. Cal. 2014) (viewing pencil-and-paper test as a “stand-in for another concern: that humans engaged in the same activity long before the invention of computers,” and concluding that test was unhelpful where “error correction codes were not conventional activity that humans engaged in before computers”).

considered individually or as an ordered combination—serve to “transform the claims into a patent-eligible application.” *Content Extraction*, 776 F.3d at 1348. Thus, the second step of the *Alice* analysis (the search for an “inventive concept”) asks whether the claim contains an element or combination of elements that ensures that the patent in practice amounts to significantly more than a patent upon the abstract idea itself. *Alice*, 134 S. Ct. at 2355.

The U.S. Supreme Court has made clear that a transformation of an abstract idea to a patent-eligible application of the idea requires more than simply reciting the idea followed by “apply it.” *Id.* at 2357 (quoting *Mayo*, 132 S. Ct. at 1294). In that regard, the Federal Circuit has repeatedly held that “[f]or the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than the performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359) (alterations in original); *see also Mortgage Grader*, 811 F.3d at 1324–25 (holding that “generic computer components such as an ‘interface,’ ‘network,’ and ‘database’ . . . do not satisfy the inventive concept requirement.”); *Bancorp Servs.*, 687 F.3d at 1278 (“To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not.”). Similarly, “[i]t is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea” where those components simply perform their “well-understood, routine, conventional” functions. *In re TLI Commc’ns.*, 2016 WL 2865693, at \*5 (limitations of “telephone unit,” “server,” “image analysis unit,” and “control unit” insufficient to adequately narrow abstract idea of “classifying and storing digital images in an organized manner” under step two of the *Alice* framework) (quotation marks omitted).

In addition, the U.S. Supreme Court explained in *Bilski* that “limiting an abstract idea to one field of use or adding token postsolution components [does] not make the concept patentable.” 561 U.S. at 612 (citing *Parker v. Flook*, 437 U.S. 584 (1978)); *see also Alice*, 134 S.Ct. at 2358 (same). The Federal Circuit has similarly stated that attempts “to limit the use of

the abstract idea to a particular technological environment” are insufficient to render an abstract idea patent eligible. *Ultramercial*, 772 F.3d at 716 (quotation marks omitted); *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015) (“An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet.”).

Finally, in considering whether a claim contains an inventive element, courts often apply the so-called “machine-or-transformation” test, which asks whether a process is (1) “tied to a particular machine or apparatus,” or (2) “transforms a particular article into a different state or thing.” *Ultramercial*, 772 F.3d at 716. Although the “machine-or-transformation test is not the sole test governing § 101 analyses, that test can provide a ‘useful clue’ in the second step of the *Alice* framework.” *Id.* at 716 (citations omitted); *Bancorp Servs.*, 867 F.3d at 1279 (discerning “no fault” in district court’s consideration of machine-or-transformation test).

### III. DISCUSSION

The question presented by Defendants’ Motion is whether the asserted claims fall within the patent-ineligible “abstract ideas” exception to Section 101. To answer this question, the Court turns to the application of the *Alice* framework described above to the asserted claims of the Papst Patents.

#### A. *Alice* Step One — Whether the Asserted Claims Are Directed to an Abstract Idea

The Court “must first determine whether the claims at issue are directed to [an abstract idea].” *Alice*, 134 S. Ct. at 2355. Defendants contend that “[t]he Papst Patents are directed to the abstract idea of verifying a test for a memory device.” Mot. at 1; *see also id.* at 8 (arguing that “the ‘gist’ of the Papst Patents is to use a generic ‘simulator’ to verify whether a memory test will violate any of the operating constraints of the memory device to be tested.”). Defendants argue that “two things are critical in assessing whether the Papst Patent claims recite an unpatentable abstract idea”: first, that the “functions recited in the asserted claims—all of which are methods—can be performed by a human test writer either mentally or with a pencil and paper”; and second, that the asserted claims “do not recite any specific algorithm or implementation details of the

1 claimed ‘simulator’ or ‘packer’—and neither does the specification.” *Id.* at 8–9.

2 Plaintiff responds that the claims are not directed to abstract ideas because the specification  
3 demonstrates that the claims “are directed to an improvement of an existing computer technology  
4 rather than an abstract idea,” Opp. at 8–9; because the claimed “simulator” and “packer” are  
5 specialized computer programs, Opp. 10–12; because “Defendants’ assertion that the functions . . .  
6 can be carried out mentally or with a pencil and paper is nonsensical,” Opp. 12–13; and because  
7 Defendants’ characterization of the asserted claims is overly general, Opp. 14–15.

8 The Court begins by examining each asserted claim in its entirety to understand the idea at  
9 the “heart” of the claimed invention. *Ultramercial*, 772 F.3d at 714 (“We first examine the claims  
10 because claims are the definition of what a patent is intended to cover”); *Accenture Global Servs.*,  
11 728 F.3d at 1341 (“[T]he court must first identify and define whatever fundamental concept  
12 appears wrapped up in the claim.”) (quotation marks omitted). In distilling the purpose of a claim,  
13 the Court is careful not to express the claim’s fundamental concept at an unduly “high level of  
14 abstraction . . . untethered from the language of the claims,” but rather at a level consonant with  
15 the level of generality or abstraction expressed in the claims themselves. *Enfish*, 2016 WL  
16 2756255 at \*6; *see also Visual Memory LLC, v. Nvidia Corp.*, No. 15-CV-789-RGA, 2016 WL  
17 3041847, at \*5 (D. Del. May 27, 2016) (“Put another way, the ‘level of abstraction’ employed by  
18 the court in describing the claims must be consonant with the level of abstraction expressed in the  
19 claims themselves.”)

20 Here, the Court agrees with Defendants that each of the asserted claims, at its heart, is  
21 directed to the use of a simulator to determine whether a memory test violates a set of rules. With  
22 minor variations in phrasing, each of the asserted claims requires (1) writing a memory test (*e.g.*,  
23 ’759 patent, cl. 1: “developing a set of operations defining the test” wherein the operations are  
24 “ordered in time”); (2) using a “simulator” to check if the test violates the rules (“operating  
25 constraints”) governing use of the memory (*e.g.*, ’759 patent, cl. 1: “passing the set of operations  
26 through a simulator capable of determining whether the set of operations violates any one of the  
27 [memory’s] operating constraints”); and (3) notifying the user of any errors found by the simulator

(e.g., '759 patent, cl. 1: "outputting an error message"). The focus of this process is on the use of a simulator, with additional steps describing the input to the simulator (the memory test and a set of rules) and the output of the simulator (error messages if the test does not comply with the rules).

Moreover, the specification emphasizes the use of the simulator as a basic feature of the claimed invention. *See, e.g.*, '759 patent, at abstract ("A simulator is used to verify that the sequence of time-ordered commands complies with a set of operating constraints for the memory."); *id.*, col. 3:55–63 (emphasizing simulator as "a first general aspect" of the invention). With the exception of Claim 14 of the '759 patent, discussed further below, the remaining asserted claims are directed to variants of the same basic concept as Claim 1 of the '759 patent. These variants consist of minor rephrasing or the addition of minor limitations varying the content of the error message output by the simulator (e.g., '759 patent, cl. 5, and '891 patent, cl. 6, which add "wherein the error message further identifies a timing adjustment to the set of operations which will resolve the time-based constraint violation.").

The Federal Circuit has held that a district court need not expressly address each asserted claim where the court concludes particular claims are representative because all the claims are "substantially similar and linked to the same abstract idea." *Content Extraction*, 776 F.3d at 1348 (quotation marks omitted); *see also Mortgage Grader*, 811 F.3d at 1324 n.6 (court did not err by discussing only one claim where claims did not "differ in any manner that is material to the patent-eligibility inquiry"). Although Claims 1 and 14 of the '759 patent are plainly representative of the remaining asserted claims, the Court has also considered each asserted claim individually, and its analysis herein concerning Claims 1 and 14 is equally applicable to each asserted claim.

Plaintiff contends that Defendants' description of the claims (and, by extension, the abstract idea identified by Defendants) is impermissibly generalized, and fails entirely to account for two categories of claim limitations: limitations related to error messages recited in each claim except Claim 14 of the '759 patent, and the "packer" limitation recited by Claim 14. *Opp.* at 15.

Plaintiff's contention is unpersuasive with regard to the error message limitations. The error message limitations of the asserted claims are secondary to (and dependent upon) the use of



the simulator itself. *See, e.g.*, ’759 patent, col. 5:26–28 (“If the list of operations violates a constraint, the simulator provides an error message.”). The use of a simulator is thus the dominant concept to which the claims are directed. Moreover, although determining the concept to which a claim is directed at the first step of the *Alice* framework cannot be “untethered from the language of the claims,” *Enfish*, 2016 WL 2756255 at \*6, it is equally clear that the Court’s formulation of the basic concept reflected by the claim need not expressly recite every limitation of a claim. *See, e.g., Ultramercial*, 772 F.3d at 715 (describing “the concept embodied by the *majority* of the limitations” despite presence of other limitations) (emphasis added); *Content Extraction*, 776 F.3d at 1347 (summarizing concept to which claims were drawn as “1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory” despite presence of other claim limitations); *Dealertrack*, 674 F.3d at 1333 (reducing multi-step process to “its simplest form [of] three steps” and summarizing concept as “processing information through a clearinghouse” despite presence of additional limitations).

With regard to the “packer” functionality of Claim 14, however, Plaintiff’s point is well-taken. Although Claim 14 of the ’759 patent is directed to the same basic concept of using a simulator to determine whether a memory test violates a set of rules, *see* ’759 patent, cl. 14, it also adds the additional concept of passing the memory test through a “packer” to minimize the time between each test command. Unlike the limitations directed to the content of error messages output by the simulator, the Papst Patents describe the packer as a conceptually separate aspect of the invention used to reduce the amount of time a memory test takes to run. *See, e.g.*, ’759 patent, at abstract (“A packer may thereafter be used to optimize run time of the verified test”); col. 4:1–4; col. 5:59–62 (describing packer as “a second general aspect” of the invention that temporally “packs” the operations making up the memory test “as tightly as possible” given a set of rules). While the other asserted claims are directed to the fundamental concept of using a simulator to determine whether a memory test violates a set of rules, Claim 14 is thus more appropriately characterized as being directed to the concepts of (1) using a simulator to determine whether a memory test violates a set of rules; and (2) using a packer to optimize the memory test.



Having thus identified the fundamental concepts to which the asserted claims are directed, the question remains whether those concepts are abstract within the meaning of the exception to patentable subject matter set forth by the U.S. Supreme Court. For the reasons set forth below, the Court concludes that each of the asserted claims is directed to a patent-ineligible abstract idea.

**1. The Asserted Claims of the Papst Patents Are Similar to Claims Previously Held to Be Directed to Abstract Ideas**

As noted above, in considering whether a claim is directed to an abstract idea, both the U.S. Supreme Court and the Federal Circuit have “compare[d the] claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish*, 2016 WL 2756255 at \*4. Defendants contend that the Federal Circuit’s relatively recent decision in *Vehicle Intelligence & Safety LLC v. Mercedes-Benz USA, LLC* is particularly instructive on these facts. 635 F. App’x 914 (Fed. Cir. 2015) (non-prec.), *cert. denied*, No. 15-1201, 2016 WL 1171121 (U.S. May 31, 2016). The Court agrees.

In *Vehicle Intelligence*, the Federal Circuit affirmed a judgment on the pleadings under Federal Rule of Civil Procedure 12(c), holding that asserted claims of U.S. Patent No. 7,394,392 were invalid as covering “only abstract ideas coupled with routine data-gathering steps and conventional computer activity.” 635 F. App’x at 915. The claims of the patent at issue related to “methods and systems that screen equipment operators for impairment, selectively test those operators, and control the equipment if an impairment is detected.” *Id.* at 916. A representative method claim was directed to a method “to screen an equipment operator for impairment” and recited limitations including “screening an equipment operator by one or more expert systems to detect potential impairment of said equipment operator,” “selectively testing said equipment operator when said screening of said equipment operator detects potential impairment of said equipment operator,” and “controlling operation of said equipment if said selective testing . . . indicates said impairment . . . , wherein said screening . . . includes a time-sharing allocation of at least one processor executing at least one expert system.” *Id.* A representative system claim recited similar concepts in terms of modules, such as “one or more expert system modules” and “a

1 screening module to screen and selectively test an equipment operator . . . wherein said screening  
2 module utilizes one or more expert system modules.” *Id.*

3 As is relevant here, the Federal Circuit held that these claims were directed to patent-  
4 ineligible abstract ideas. A particular focus of the court’s analysis was the level of generality at  
5 which the computerized “expert system” performing the impairment screening and control was  
6 claimed, and the equivalent generality with which that expert system was described in the  
7 specification. Specifically, the Federal Circuit noted that “critically absent from the entire patent”  
8 was an explanation of *how* the expert system or modules actually carried out the claimed  
9 functions. *Id.* at 918. Although the patent specified the functions that the expert system would  
10 perform (*e.g.*, determining whether or not the equipment operator was impaired), neither the  
11 specification nor the claims explained, for example, how “the decision module determines if an  
12 operator is impaired . . .; assuming this determination can be made, how the decision module  
13 decides which control response to make; and assuming the control response decision can be made,  
14 how the ‘expert system’ effectuates the chosen control response.” *Id.* Rather, the patent “[a]t best  
15 . . . answer[ed] the question of how to provide faster, more accurate and reliable impairment  
16 testing by simply stating ‘use an expert system.’” *Id.* As the court concluded, “in the absence of  
17 any details about how the ‘expert system’ works, the claims at issue are drawn to a patent-  
18 ineligible abstract idea.” *Id.*

19 The Federal Circuit’s analysis of the claims at issue in *Vehicle Intelligence* is equally  
20 applicable to the asserted claims here. The asserted claims of the Papst Patents replace manual  
21 evaluation of a memory test with “a simulator capable of determining whether the set of  
22 operations violates any one of the operating constraints” of the memory, ’759 patent, cl. 1, and  
23 manual optimization of a memory test with “a packer to minimize run time of the test in relation to  
24 the operating constraints,” *id.*, cl. 14. But just as in *Vehicle Intelligence*, neither the specification  
25 nor the claims of the Papst Patents provide any meaningful explanation of *how* the claimed  
26 simulator determines whether operating constraints are violated. Nor do the specification or  
27 claims offer any explanation of how the claimed packer optimizes the memory test. Rather, the

Papst Patents simply describe, in the most general of terms, that the simulator “runs the set of operations against the set of constraints defined by the [memory device] parameter list,” ’759 patent, col. 5:25–28, and that the packer operates by “iteratively call[ing] the simulator to produce a version of the time-ordered sequence [of memory test commands] which minimizes the time allocated between different operations,” *id.* col. 5:62–66; *see also id.* col. 5:7–9 (explaining that “[t]he simulator is event-driven and directly models the behavior of one or more memory devices,” but offering no further explanation how modeling occurs).

Similarly, the specification states, again in general terms, that the simulator can be “written in a high level language like ‘C’ on a UNIX based platform” or with “[a] standard tool set or threads package, such as the CSIM17 software library[.]” *Id.* col. 6:56–59. The packer is similarly described in general terms as being implemented “as a ‘Perl script,’ a well known UNIX programming language.” *Id.* col. 6:64–65. Although the specification thus includes generic descriptions of well-known programming languages that could be used in the abstract to create a simulator or packer, absent from the Papst Patents is any description of any specific algorithm for simulator or packer operation to be implemented with those languages, or other implementation details that might narrow the scope of the abstract idea of creating and using a generic simulator or packer. In essence, the simulator and packer in the asserted claims of the Papst Patents are claimed simply as black boxes defined by a desired function. As in *Vehicle Intelligence*, the Papst Patents thus answer “the question of how to provide faster, more accurate and reliable [verification of memory tests] by simply stating ‘use [a simulator or packer].’” 635 F. App’x at 918. Without more, the asserted claims are drawn to a patent-ineligible abstract idea.

Plaintiff argues that the asserted claims are not directed to abstract ideas because the claimed “simulator” and “packer” refer to “specific, defined, special-purpose software components that achieve functionality different from existing and conventional practices.” Opp. 9–12.<sup>8</sup> This

---

<sup>8</sup> In connection with this argument, Plaintiff requests without opposition that the Court take judicial notice of several exhibits attached to the Declaration of Andrew G. DiNovo submitted with the Opposition. Opp. at 11 n. 2; *See* No. 16-CV-00925-LHK, ECF No. 93 (“DiNovo Declaration”). The Court takes judicial notice of the dictionary definition submitted as Exhibit A

argument is unpersuasive. First, Plaintiff’s contention that the simulator and packer claimed are something other than generically identified software components performing conventional functions is belied by the complete lack of description in the Papst Patents as to *how* those components should be implemented. Indeed, the Papst Patents assume that implementation of a generic simulator or packer is within the abilities of one of ordinary skill in the art, and state without elaboration that the simulator or packer can be written in standard programming languages using standard tools. *See* ’759 patent, col. 6:55–65; *cf. Content Extraction*, 776 F.3d at 1348 (holding that “use of a generic scanner and computer to perform well-understood, routine, and conventional activities commonly used in industry” was insufficient to render claims non-abstract). The concept of a software “packer” or a “simulator” for a memory device, specified at the level of generality present in the asserted claims of the Papst Patents, is thus no different than the other types of generic software components, such as a “database,” that the Federal Circuit has described as “generic computer elements performing generic computer tasks.” *Intellectual Ventures I*, 792 F.3d at 1368; *Mortgage Grader*, 811 F.3d at 1324–25 (rejecting claims reciting “generic computer components” including a “database”); *Accenture Global Servs.*, 728 F.3d at 1344 (rejecting claims requiring “a combination of computer components including an insurance transaction database, a task library database, a client component, and a server component, which include[d] an event processor, a task engine, and a task assistant”).

Second, Plaintiff’s argument closely parallels an argument rejected by the Federal Circuit in *Vehicle Intelligence*, albeit in the second step of the *Alice* analysis. There, the patentee argued that “its methods are embedded in ‘specialized existing equipment modules,’ as opposed to

---

to the DiNovo Declaration and the May 6, 2016 Institution Decision of the United States Patent and Trademark Office’s Patent Trial and Appeal Board (“PTAB”), submitted as Exhibit D to the DiNovo Declaration, concerning the claims of the ’759 patent in *inter partes* review No. IPR2016-00104. However, Exhibits B and C to the DiNovo Declaration appear to be technical materials printed from Defendants’ websites. Because Plaintiff does not explain (and it is not otherwise apparent) why such documents may be appropriately judicially noticed, the Court denies Plaintiff’s request concerning those documents. *See* ECF No. 93, Ex. B (Altera document); Ex. C (Xilinx document). Regardless, none of the documents supplied with the DiNovo Declaration would alter the Court’s conclusions herein.

generic computers, which renders them patent-eligible.” 635 F. App’x at 919. As is also the case here, however, the Federal Circuit in *Vehicle Intelligence* noted that “markedly absent from the . . . patent is any explanation of how the methods at issue can be embedded into these existing modules.” *Id.* The Federal Circuit further explained that “[m]erely stating that the methods at issue are performed on already existing vehicle equipment”—much as Plaintiff here argues its methods are performed on existing software components—“does not save the disputed claims from abstraction.” *Id.*

In addition, Plaintiff relies heavily upon the Federal Circuit’s decisions in *Enfish*, 2016 WL 2756255, at \*4, and *DDR Holdings*, 773 F.3d at 1248, 1257, to argue that the “[a]sserted [c]laims here are directed to an improvement of an existing computer technology rather than an abstract idea.” Opp. at 8; *see also id.* at 6. Plaintiff’s argument is not persuasive, however, because unlike the claims at issue in *Enfish* and *DDR Holdings*, the asserted claims of the Papst Patents are not directed to any improvement of the computer or technology itself.

In *Enfish*, the Federal Circuit “clarified that a relevant inquiry at [*Alice*] step one is ‘to ask whether the claims are directed to improvement to computer functionality versus being directed to an abstract idea.’” *In re TLI Commc’ns*, 2016 WL 2865693, at \*3 (quoting *Enfish*, 2016 WL 2756255, at \*4). In *Enfish*, however, the claims at issue were directed “to a specific improvement to the way computers operate,” in the form of a data structure that used a “self-referential table.” *Enfish*, 2016 WL 2756255, at \*5. Rather than simply automating a process using a computer as a tool, the claims involved “a specific type of data structure designed to improve the way a computer stores and retrieves data in memory.” *Id.* at \*8. The claims were therefore directed to an improvement of the functioning of the computer itself, as opposed to an abstract idea merely performed on a computer. Similarly, the claims at issue in *DDR Holdings* were directed to an improvement of the functionality of network technology itself. The claims there “specif[ied] how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” 773 F.3d at 1258. The claims thereby solved a “particular Internet-centric problem” by means that did

1 not recite “the routine or conventional use of the Internet” to carry out a process. *Id.* at 1259.

2 In contrast, the asserted claims here bear little resemblance to the claims at issue in *Enfish*  
3 and *DDR Holdings*. Although Plaintiff contends that “the [a]sserted [c]laims improve the  
4 functioning of the computer itself,” Opp. at 14, that conclusion does not follow from the  
5 specification of the Papst Patents or the asserted claims. The Papst Patents are directed to methods  
6 of verifying and optimizing memory tests, not to improving the computer or software components  
7 used to carry out those methods. Unlike the improvements to data structures claimed by the  
8 patents at issue in *Enfish*, the Papst Patents do not purport to improve the underlying technology of  
9 memory devices or particular techniques of testing memory devices. For example, the Papst  
10 Patents do not purport to improve the design, operation, or functionality of memory devices in any  
11 way. Nor do the Papst Patents disclose any improvement to the design or operation of the  
12 simulator or packer recited in the asserted claims. Indeed, as noted above, the Papst Patents offer  
13 scant detail as to how the simulator and packer should be implemented, let alone details of  
14 improvements to those components. The focus of the asserted claims is instead on “a process that  
15 qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool”—specifically,  
16 using a generically claimed simulator as a tool to determine whether a memory test violates a set  
17 of rules, and using a generically claimed packer to optimize the test. *Enfish*, 2016 WL 2756255, at  
18 \*5.

19 Plaintiff’s argument that abstractness is defeated because the “claimed methods solve the  
20 problems [identified in the specification] or improve memory-device testing” in various ways is  
21 similarly unavailing. Opp. at 8–9 (citing *Enfish*, 2016 WL 2756255, at \*6). In *Enfish*, the Federal  
22 Circuit observed that benefits described in the patent’s specification bolstered the court’s  
23 conclusion that the claims were directed to an improvement of existing database technology  
24 through the use of a “self-referential table.” *Enfish*, 2016 WL 2756255, at \*5. In contrast to the  
25 asserted claims in the instant case, however, the *Enfish* claims were directed to implementations of  
26 the self-referential tables or data structures that provided the purported improvement. *See id.*

27 Here, the primary improvement cited by Plaintiff—the efficient generation of memory tests



for modern, complex memory devices, *see* Opp. at 9, 2–3—is not reflected in the limitations of the asserted claims. Nothing in the asserted claims limits the claimed processes to the generation of tests only for modern or complex memory devices, as opposed to simple tests for simple, conventional memory devices. *See* ’759 patent, col. 2:1–3 (“The operation of early memory devices was simple and characterized by relatively few constraints.”). The specification’s description of the benefits of automation of a process using a computer is thus insufficient to save the asserted claims from abstractness. *See Accenture Global Servs.*, 728 F.3d at 1345 (focusing on the language of the claims and stating that the “level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method”). The remaining improvements cited by Plaintiff recite general advantages of using a computer to automate a memory-test verification process previously done manually, not improvements over a prior computerized method for simulating or verifying memory tests. *See* Opp. 8–9. Plaintiff is thus incorrect that the asserted claims are directed to a specific improvement of existing technology, as opposed to unduly preempting an abstract idea.

## **2. The Asserted Claims of the Papst Patents Claim Automation of Mental or Pencil-and-Paper Processes**

In addition, Defendants contend that the abstract nature of the asserted claims is confirmed by the fact that “[t]he fundamental concept set out in each of the asserted claims can be—and, at least with early, simply memory devices, often was—carried out by a human test writer either mentally or with the aid of a pencil and paper.” Mot. at 10.

Defendants are correct that the steps of the asserted claims reflect activity described by the specification as previously having been carried out by humans, and which are capable of being performed mentally or with pencil and paper. As the Papst Patents describe, human test writers wrote memory tests for early memory devices, and did so in accordance with the constraints of particular memory devices. ’759 patent, col. 2:23–34; *see also id.*, col. 1:58–61 (“In creating a test, a test writer must define a sequence of operations which store and retrieve data to/from the memory device in accordance with certain ‘operating constraints.’”). Defendants also



convincingly argue that there is no reason why, at least for simple memory devices, the step of each asserted claim performed by “a simulator capable of determining” whether the memory tests violates any of the constraints of the memory device could not instead be performed mentally or with pencil and paper, simply by comparing the operations of a simple memory test to the rules obtained from a simple memory device data sheet. *See, e.g.*, ’759 patent, col. 2:1–3 (noting that “[t]he operation of early memory devices was simple and characterized by relatively few constraints); *id.* col. 3:35–37 (acknowledging that memory devices and memory tests have varying levels of complexity). Similarly, the optimization step performed by the “packer” recited by Claim 14 of the ’759 patent reflects a process that could be performed mentally or with pencil and paper. *See* ’759 patent, col. 3:39–40 (acknowledging “a test writer is motivated to write efficient tests”); *id.* col. 6:10–13 (acknowledging that test writers previously worked to “minimiz[e] the time allocated between operations in the sequence of operations when the test is being written”). An equivalent function to the error messages recited by the asserted claims (other than Claim 14 of the ’759 patent) can likewise be performed by a human test writer by noting a violation of a rule by the memory test, or noting the solution to such a violation as a result of the mental steps or pencil-and-paper calculations described above.

Plaintiff contends that Defendants’ argument that the “functions recited in the [a]sserted [c]laims can be carried out mentally or with a pencil and paper is nonsensical” for three basic reasons: (1) because the claims “must be implemented on a computer”; (2) because the “packer” of Claim 14 of the ’759 patent operates differently than a human test writer optimizing a test does; and (3) because “an unaided human cannot account for the near-instantaneous speed of memory operations.” *Opp.* at 12–13. None of these reasons is persuasive.

First, Plaintiff’s contention that the functions recited by the claims literally require the use of “software and computers” does not undermine Defendants’ argument. *See, e.g.*, *Opp.* at 12 (arguing that “a human being cannot . . . iteratively call a simulator to optimize” a memory test). Although cases have found that claims directed to “computational methods which can be performed *entirely* in the human mind” are abstract, *CyberSource*, 654 F.3d at 1373 (emphasis

1 added), the Federal Circuit has also held that claims that literally require the use of a computer, but  
2 nevertheless reflect routine automation of activities which “could all be performed by humans  
3 without a computer” may be abstract. *Mortgage Grader*, 811 F.3d at 1324 (claims directed to  
4 patent-ineligible abstract idea where steps “could all be performed by humans without a  
5 computer” despite literally requiring “[a] computer-implemented system” including “a database,”  
6 “a computer system,” “a first interface,” and “a second interface”).

7 Second, Plaintiff’s argument that the packer operates differently than a human test  
8 optimizer is unpersuasive. Opp. at 13 (arguing that “just because the packer shares a common  
9 goal with a human test writer does not mean that they reach the goal in the same way”). In this  
10 regard, Plaintiff essentially argues that human test writers previously attempted to minimize run  
11 time of a memory test while writing the test, while the packer operates after the test is written. *Id.*  
12 However, Plaintiff identifies no reason why a human could not simply optimize a test after it is  
13 written, regardless of whether that human would also attempt to minimize the run time of the test  
14 when first writing the test. Moreover, Plaintiff’s argument that the operation of the packer should  
15 be distinguished from the way humans previously optimized memory tests is particularly  
16 unpersuasive given the generality with which the packer element is described, and the absence of  
17 any implementation details or claim limitations directed to the specific way in which the claimed  
18 packer achieves its goal.

19 Third, and finally, the Federal Circuit has repeatedly and emphatically rejected arguments  
20 similar to Plaintiff’s contention that a computerized process is necessary to handle the complexity  
21 or speed contemplated by the invention where such complexity is not reflected in the claim  
22 limitations. *See, e.g., Intellectual Ventures I*, 792 F.3d at 1367 (“Nor . . . does claiming the  
23 improved speed or efficiency inherent with applying the abstract idea on a computer provide a  
24 sufficient inventive concept”); *id.* at 1370 (“[O]ur precedent is clear that merely adding computer  
25 functionality to increase the speed or efficiency of the process does not confer patent eligibility on  
26 an otherwise abstract idea.”); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed.  
27 Cir. 2015) (“[R]elying on a computer to perform routine tasks more quickly or more accurately is

insufficient to render a claim patent eligible.”).

In this respect, Plaintiff’s argument is akin to the argument rejected by the Federal Circuit in *Planet Bingo, LLC v. VKGS LLC*, 576 F. App’x 1005, 1008 (Fed. Cir. 2014) (non-prec). There, the Federal Circuit held the claimed computerized bingo management system was directed to patent-ineligible subject matter, despite the patentee’s argument that “‘in real world use, literally thousands, if not millions of preselected Bingo numbers are handled by the claimed computer program,’ making it impossible for the invention to be carried out manually.” *Id.* The complexity upon which the patentee relied, however, was not reflected in the actual claims at issue, which required at most “two sets of Bingo Numbers,” a “player,” and “a manager.” *Id.* That is equally true in the instant case, where the claims are not limited to complex tests for complex memory devices, or similarly restricted in a manner which somehow might make the “near-instantaneous speed of memory operations” which Plaintiff cites relevant.<sup>9</sup> *See* Opp. at 13. As in *Planet Bingo*, the use of a computer in the Papst Patents might make a tedious verification process faster and more efficient, but it does not change the fundamental fact that the functions recited could also be performed by humans without a computer. *Cf.* ’759 patent, col. 3:51–52; col. 6:18–21 (suggesting that invention lifts the “burden” from human test writer by automating manual process previously performed).

As noted above, whether a claim reflects routine automation of steps that could be performed by humans mentally or with a pencil and paper is a useful tool in determining whether the claim as a whole is directed to an abstract idea. *See, e.g., Mortgage Grader*, 811 F.3d at 1324; *cf. CyberSource*, 654 F.3d at 1373. Here, the asserted claims’ reflection of generic, and conventional, computerization of processes previously performed by humans without computers confirms the Court’s conclusion that the asserted claims are directed to patent-ineligible abstract ideas.

---

<sup>9</sup> As Defendants also correctly note, Plaintiff’s argument concerning the speed of modern memory devices fails for the additional reason that the claims are not directed to memory devices themselves (which Plaintiff states operate at “near-instantaneous speed”), but rather to generating and verifying memory tests—activity which need not occur at such speeds. Reply at 6.

For the reasons stated above, the Court concludes that each of the asserted claims is directed to a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2355.

**B. *Alice* Step Two — Whether the Asserted Claims Contain an “Inventive Concept” Sufficient to Confer Patent Eligibility**

Having determined that the asserted claims are directed to patent-ineligible abstract ideas, the Court proceeds to the second step of the *Alice* framework to determine whether the claim’s limitations—considered individually or as an ordered combination—serve to “transform the claims into a patent-eligible application.” *Content Extraction*, 776 F.3d at 1348. Here, the Court concludes that the asserted claims’ limitations, considered both individually and as a whole, include no such transformation or inventive concept sufficient to ensure that the claims in practice amount to significantly more than a patent upon the abstract idea itself. *See Alice*, 134 S. Ct. at 2355.

When viewed as an ordered combination, the claim limitations of the asserted claims specify steps at a high level of generality using generic software in order to carry out the abstract idea of (1) using a simulator to determine whether a memory test violates a set of rules and (2) using a packer to optimize that test. The U.S. Supreme Court in *Alice* explained that these types of claim limitations—which consist of little more than reciting the idea followed by “apply it”—are insufficient to salvage a claim directed to an abstract idea. *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1290); *see also Dealertrack*, 674 F.3d at 1333 (rejecting argument that use of a computer sufficiently limited the claims where the patent “[did] not specify how the computer hardware and database are specially programmed to perform the steps claimed in the patent”) (quotation marks omitted).

Plaintiff’s arguments to the contrary, which occupy a scant three pages of Plaintiff’s Opposition, largely restate the same arguments made by Plaintiff in connection with the first step of the *Alice* framework. Opp. at 16–18. For example, as with Plaintiff’s argument that the asserted claims are not directed to an abstract idea, Plaintiff contends that the claims as a whole contain an “inventive concept” at *Alice* step two because they include a simulator, and “the

specialized simulator is not a generic software implementation devoid of any particular details.”  
 Opp. 16. However, the Court has already considered, and rejected, that argument in connection  
 with its analysis of the first step of the *Alice* framework. *See supra* Section III.A.1. Plaintiff’s  
 contentions that the asserted claims do not seek to patent abstract ideas because the claims recite a  
 “simulator” or “packer” are thus incorrect.<sup>10</sup>

In addition, Plaintiff’s arguments that the asserted claims are transformed by individual  
 claim elements are equally unavailing. Plaintiff argues that four limitations of various asserted  
 claims—which Plaintiff identifies as the “simulator,” “packer,” “outputted error,” and  
 “adjustment” elements—are sufficient, when viewed individually, to transform the abstract idea  
 into patent-eligible claims. Opp. at 18. For the reasons previously discussed, however, the first  
 two limitations upon which Plaintiff relies (the “simulator” and “packer” elements), each of which  
 is claimed at a high level of generality, are insufficient to significantly narrow the scope of the  
 claims beyond the abstract idea itself. Moreover, as the Federal Circuit has held, “[i]t is well-  
 settled that mere recitation of concrete, tangible components is insufficient to confer patent  
 eligibility to an otherwise abstract idea” where those components simply perform their “well-  
 understood, routine, conventional” functions. *In re TLI Commc’ns*, 2016 WL 2865693, at \*5  
 (quotation marks omitted). There is no suggestion in the specification of the Papst Patents that  
 these two elements, the implementation of which is left largely unspecified, act unconventionally  
 or do anything other than operate in their expected manner.<sup>11</sup>

---

<sup>10</sup> Plaintiff’s suggestion that the claims are sufficiently limited because the simulator is limited to  
 “receiving particular inputs: memory device operations and memory device operating constraints”  
 is essentially an argument that the abstract concept is limited because the asserted claims apply to  
 memory device tests. Opp. at 16. An abstract idea, however, “does not become nonabstract by  
 limiting the invention to a particular field of use or technological environment[.]” *Intellectual  
 Ventures I*, 792 F.3d at 1366.

<sup>11</sup> Papst notes that the PTAB recently denied institution of Xilinx’s petition for *inter partes* review  
 in connection with certain claims of the ’759 patent containing the “packer” limitation, and argues  
 that the PTAB’s ruling is evidence of an inventive concept at *Alice* step two. Opp. at 18. Neither  
 a Section 101 challenge generally nor the more specific question articulated by the U.S. Supreme  
 Court as the second step of the *Alice* framework was before the PTAB, however, which ruled only  
 that the particular prior art cited in Xilinx’s petition failed to show a reasonable likelihood that  
 Xilinx would prevail in establishing unpatentability under 35 U.S.C. § 103 (relating to  
 obviousness). *See* DiNovo Decl., Ex. D., at 36; *see also* 35 U.S.C. § 311(b) (*inter partes* review

The second set of elements, to which Plaintiff refers as the “outputted error” and “adjustment” elements, similarly do not sufficiently narrow the claims in a manner sufficient to avoid preemption of the abstract idea itself. The Papst Patents contain no suggestion of any novel or unconventional way in which an error message or proposed adjustment would be created or displayed by the simulator that might impose a meaningful limitation on the claims’ scope. Rather, using a computer (in some unspecified way) to output an error message or a suggested adjustment based on a calculation of rules violations (in some unspecified way) is precisely the type of limitation “reciting no more than generic computer elements performing generic computer tasks [that] does not make an abstract idea patent-eligible.” *Intellectual Ventures I*, 792 F.3d at 1368. Further, any error message or adjustment is secondary to the use of the simulator, which the Papst Patents describe as the component responsible for comparing the memory test to a set of rules. Merely displaying the results of that calculation using a computer is similar to the type of “post-solution” activity that the U.S. Supreme Court suggested was insufficient to salvage an otherwise abstract claim in *Bilski*. See 561 U.S. at 610–11; see also *Flook*, 437 U.S. at 590 (rejecting “[t]he notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process” where patentee argued that “the adjustment of the alarm limit to the figure computed” by the process made claim patent-eligible).

Finally, Plaintiff concludes its argument that the asserted claims contain transformative elements by devoting a single sentence to the machine or transformation test: “Moreover, each of the [a]sserted [c]laims is tied to a particular device—a computerized simulator for a semiconductor device.” Opp. at 18. As explained at length above, however, the Papst Patents describe and claim the simulator at a level of generality that makes it a generic computer element, rather than a particular device sufficient to save an otherwise abstract claim. See *Alice*, 134 S. Ct. at 2358 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”).

---

limited to grounds “that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications”); *id.* § 314(a) (standard for instituting review).



Because the asserted claims are directed to an abstract idea and nothing in the claims adds an inventive concept, the claims are not patent-eligible under § 101.

### **C. Claim Construction and Papst's Alternative Request for Denial Without Prejudice**

As a final matter, Plaintiff argues that Defendants' Motion should be denied without prejudice because "there are relevant fact-related disputes and claim construction issues." Opp. at 19. Plaintiff's generalized objection that resolution of the Motion should be delayed pending claim construction is without force. "[C]laim construction is not an inviolable prerequisite to a validity determination under § 101[.]" *Bancorp Servs.*, 687 F.3d at 1273. Moreover, Plaintiff has neither explained how any particular construction would alter the Section 101 analysis nor even proposed any such construction that the Court might view in the light most favorable to Plaintiff. *See, e.g., Open Text S.A. v. Alfresco Software Ltd*, No. 13-CV-04843-JD, 2014 WL 4684429, at \*3 (N.D. Cal. Sept. 19, 2014) ("In this case, the parties have not sought construction of any terms . . . and this lack of dispute over the proper construction of the asserted claims confirms that it is unnecessary to engage in claim construction before addressing validity under Section 101.").

At best, Plaintiff's Opposition argues elliptically that a simulator should be construed to include a specific software component for modeling semiconductor devices. Opp. at 10–12. Even if the Court were to interpret Plaintiff's arguments as a proposed construction of the term "simulator" and construe the term to include a software component for modeling semiconductor devices or predicting the behavior of a circuit, that construction would not alter the generic nature of the simulator as claimed in the asserted claims (much as inclusion of a generic "database," which is also a software component with a specific meaning, has been found not to salvage similar claims).

As explained above the Court has a "full understanding of the basic character of the claimed subject matter," *Content Extraction*, 776 F.3d at 1349, and Plaintiff has not identified any material factual dispute that exists or any claim construction issue that might affect the Court's Section 101 analysis. Accordingly, there is no reason why the Court cannot proceed with



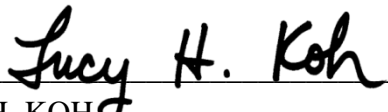
adjudication of the merits of Defendant's Motion at this time.

#### **IV. CONCLUSION**

For the foregoing reasons, the Court concludes that each of the asserted claims of the Papst Patents is directed to a patent-ineligible abstract idea, and that the limitations of the asserted claims do not provide an "inventive concept" sufficient to transform these claims into patentable subject matter. Accordingly, the Court GRANTS Defendants' Motion for Judgment on the Pleadings. Claims 1, 4, 5, and 14 of the '759 patent and claims 1, 2, 5, and 6 of the '891 patent are invalid under 35 U.S.C. § 101. Because the asserted claims are directed to patent-ineligible subject matter, a defect which cannot be cured through amendment of a complaint, Plaintiff's claims for infringement are DISMISSED WITH PREJUDICE.

**IT IS SO ORDERED.**

Dated: June 9, 2016

  
 LUCY H. KOH  
 United States District Judge

United States District Court  
 Northern District of California